

CLAIMS

What is claimed is:

1. A mine removal system in mined areas, comprising three independent and co-ordinated modular units (C, A, T) respectively formed of a remote controlled air-means (A) acting above the ground; a remote controlled self-propelled terrestrial means (T), and autonomous terrestrial means (C) with manned crew forming the control and check unit of the system, characterized in that said air-means is an aircraft provided with a maneuverable mechanical arm and a nuclearly scanning sensor capable of effecting survey of the underlying ground.
2. A mine removal system according to claim 1, characterized in that said terrestrial means (T) is provided with a gun able to shoot shells formed of solid, semisolid or liquid masses.
3. A mine removal system according to claim 2, characterized in that said gun uses a fire-producing propellant.
4. A mine removal system according to claim 3, characterized in that said fire-producing propellant is ballistite.
5. A mine removal system according to claim 4, characterized in that said gun uses a high pressure mixed propellant in connection with a powerful compressor.
6. A mine removal system according to claim 1, characterized in that said maneuverable mechanical arm is electrically or hydraulically operated and has an action range of about 280°.
7. A mine removal system according to claim 1, characterized in that said terrestrial means (T) is provided with a multifunctional articulated arm on

which there are mounted mechanical drilling and grasping means with pressure sensor able to determine the consistency of possible bodies to be picked up and to consequently modify the grasping force without squashing.

8. A mine removal system according to claim 7, characterized in that said multifunctional arm is articulated on four rotary joints and a 360° rotating fifth wheel.

9. A mine removal system according to claim 1, characterized in that said terrestrial means (T) is wheeled with four or six independent driving wheels, each being equipped with an autonomous electrically or hydropneumatically operated motor.

10. A mine removal system according to claim 7, characterized in that said grasping means are formed of an electro-hydraulic telescopic gripper.

Applicant: Giovanni Battista Marcolla
Application No.: Not Yet Known

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IN THE CLAIMS

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1. (Original) A mine removal system in mined areas, comprising three independent and co-ordinated modular units (C, A, T) respectively formed of a remote controlled air-means (A) acting above the ground; a remote controlled self-propelled terrestrial means (T), and autonomous terrestrial means (C) with manned crew forming the control and check unit of the system, characterized in that said air-means is an aircraft provided with a maneuverable mechanical arm and a nuclearly scanning sensor capable of effecting survey of the underlying ground.

2. (Original) A mine removal system according to claim 1, characterized in that said terrestrial means (T) is provided with a gun able to shoot shells formed of solid, semisolid or liquid masses.

3. (Original) A mine removal system according to claim 2, characterized in that said gun uses a fire-producing propellant.

4. (Original) A mine removal system according to claim 3, characterized in that said fire-producing propellant is ballistite.

5. (Original) A mine removal system according to claim 4, characterized in that said gun uses a high pressure mixed propellant in connection with a powerful compressor.

6. (Currently Amended) A mine removal system according to claim 1-~~or 2~~, characterized in that said maneuverable mechanical arm is electrically or hydraulically operated and has an action range of about 280°.

7. (Currently Amended) A mine removal system according to claim 1-~~or 2~~, characterized in that said terrestrial means (T) is provided with a multifunctional articulated arm on which there are mounted mechanical drilling and grasping means with pressure sensor able to determine the consistency of possible bodies to be picked up and to consequently modify the grasping force without squashing.

8. (Original) A mine removal system according to claim 7, characterized in that said multifunctional arm is articulated on four rotary joints and a 360° rotating fifth wheel.

9. (Currently Amended) A mine removal system according to ~~any of the preceding claims~~ claim 1, characterized in that said terrestrial means (T) is wheeled with four or six independent driving wheels, each being equipped with an autonomous electrically or hydropneumatically operated motor.

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10. (Currently Amended) A mine removal system according to ~~any of claims 7 to 9~~ claim 7, characterized in that said grasping means are formed of an electro-hydraulic telescopic gripper.